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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FEATHERSTONE, MARK D

ART UNIT

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2423

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/777,890

**Applicant(s)**

ANDO ET AL.

**Examiner**

MARK D. FEATHERSTONE

**Art Unit**

2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Amendment***

Response to amendment filed 02/25/2009. Claims 1-3, 8-11, and 15-17 are amended. Claims 1-17 are pending.

### ***Response to Arguments***

Applicant's arguments filed 02/25/2009 have been fully considered but they are not persuasive. Applicant has amended the claims to state that the selecting means selects optimal procedures about image quality and sound quality, and that the system provides the users with a product or circuit board with a function of the image and sound quality. The selecting means determines the optimal procedures based on user preference information. The system of Zomaya does provide users with a product having a function of sound or image quality (fig. 1, and column 4, lines 19-54; Zomaya discloses the hardware configuration of the computer (including the sound card and the video card; furthermore in the background column 1, lines 32-41 Zomaya discloses upgrade recommendations of "video capabilities...etc") and that the invention determines the hardware configuration of the computer to make a proper hardware upgrade recommendation. In column 9, lines 30-46, Zomaya discloses that the target configuration of the computer which will be used to recommend upgrades to the current configuration, can be established using "user preferences". Therefore, the system of Zomaya does suggest (and provide if the user selects the product; column 8, line 63 – column 9, line 7) a product to the user to increase image and

sound quality (corresponding to an upgraded video or sound card). Examiner notes that applicant has deleted the limitation of "the user information includes operation information representing parameter changes of image of audio signal based on an operation by a user". The combination of references does not teach obtaining optimal procedures about image quality and sound quality based on user preference information relating to parameter changes of the image or audio signal.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-3, 8-12, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prokopenko et al, US Patent # 7188355, hereinafter Prokopenko, in view of Zomaya et al, US Patent # 6711676, hereinafter Zomaya.

With regard to claim 1, Prokopenko discloses:

An information management system comprising:

a center processing apparatus for performing user-information analysis (column 6, lines 15-22; Prokopenko discloses an "avatar agent" that collects user information and analyzes it); and a plurality of information processing apparatuses

for storing user information (column 9, lines 45-47) wherein:

said center processing apparatus comprises:

acquiring means for acquiring user information collected from each of the information processing apparatuses (column 9, lines 54-59);

analyzing means for analyzing the user information acquired by said acquiring means (column 9, lines 59-62);

user-information recording means for recording, in a database, the information obtained by the analysis by said analyzing means (column 10, lines 46-56 (Prokopenko describes storing the updated user profile obtained from the analysis);

selecting means for selecting, based on the user information obtained by the analysis by said analyzing means, optimal procedures for users of the information processing apparatuses (column 9, lines 66-67; Prokopenko describes the set of recommendations being sent to the Avatar manager) ;

providing means for providing the users with the optimal procedures selected by said selecting means (column 10, lines 1-3)

each of said information processing apparatuses comprises:

operation-information accepting means for accepting operation information from the user (Figure 1A, item 35 and column 6, lines 13-15);

signal processing means for processing an input signal, based on the operation information accepted by said operation-information accepting means (The system of Prokopenko inherently process the input signal containing operation information when it is received); and

storage means for storing, as the user information, the operation information concerning the input signal (column 9, lines 45-47)

Prokopenko fails to disclose that the selecting means selects optimal procedures about image and sound quality based on user preference information, or providing users with a product or a circuit board having a function of the optimal procedures about image quality and sound quality selected by said selecting means to update an existing product or circuit board having a corresponding function. The system of Zomaya does provide users with a product having a function of sound or image quality (fig. 1, and column 4, lines 19-54; Zomaya discloses the hardware configuration of the computer (including the sound card and the video card; furthermore in the background column 1, lines 32-41 Zomaya discloses upgrade recommendations of "video capabilities...etc") and that the invention determines the hardware configuration of the computer to make a proper hardware upgrade recommendation. In column 9, lines 30-46, Zomaya discloses that the target configuration of the computer which will be used to recommend upgrades to the current configuration, can be established using "user preferences". Therefore, the system of Zomaya does suggest (and provide if the user selects the product;

column 8, line 63 – column 9, line 7) a product to the user to increase image and sound quality (corresponding to an upgraded video or sound card). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Zomaya to further use the information management system of Prokopenko to recommend/provide hardware audio/video upgrades to the system to provide a better user experience.

Claim 2 is the method corresponding to the system of claim 1, and is analyzed and rejected accordingly.

Claim 3, is the center processing apparatus as disclosed in claim 1, and is analyzed and rejected accordingly.

Claim 8 is the method of acquiring, analyzing, and selecting optimal procedures for a user as disclosed in claim 1, and is rejected as applied to claim 1.

Claim 9 is the computer instructions on a computer readable medium to drive the system of claim 1, and is analyzed and rejected accordingly.

Claim 10 is the computer instructions on a computer readable medium to drive the system of claim 3, and is analyzed and rejected accordingly.

With regard to claim 11, Prokopenko discloses:

An information processing apparatus comprising:  
operation-information accepting means for accepting operation information from a user (column 7, lines 35-37; Prokopenko describes sending user information from a user to the avatar agent for processing); signal-processing means for

processing an input signal in accordance with a predetermined procedure, based on the operation information accepted by said operation-information accepting means (column 7, lines 41-48; the avatar agent collects the data input by the user (via a remote control) based on the type of information); and storage means for storing, as user information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal (column 9, lines 44-47), wherein the procedure is determined based on past user information for the user (column 7, lines 18-25; Prokopenko describes information from a past user being input by selecting an animation character on a screen. If the user is identified, past information would be used as part of the recommendation procedure)

Prokopenko fails to disclose that the selecting means selects optimal procedures about image and sound quality based on user preference information, or signal-processing means for processing an input signal in accordance with a product or a circuit board having a function of the optimal procedures about image quality and sound quality selected by said selecting means to update an existing product or circuit board having a corresponding function. The system of Zomaya does provide users with a product having a function of sound or image quality (fig. 1, and column 4, lines 19-54; Zomaya discloses the hardware configuration of the computer (including the sound card and the video card; furthermore in the background column 1, lines 32-41 Zomaya discloses upgrade recommendations of "video capabilities...etc") and that the



invention determines the hardware configuration of the computer to make a proper hardware upgrade recommendation. In column 9, lines 30-46, Zomaya discloses that the target configuration of the computer which will be used to recommend upgrades to the current configuration, can be established using "user preferences". Therefore, the system of Zomaya does suggest (and provide if the user selects the product; column 8, line 63 – column 9, line 7) a product to the user to increase image and sound quality (corresponding to an upgraded video or sound card). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Zomaya to further use the information management system of Prokopenko to recommend/provide hardware audio/video upgrades to the system to provide a better user experience.

With regard to Claim 12, Prokopenko further discloses the ability to store the value of a parameter set by the user and a time that the parameter is set by the user (In column 9, lines 48-54; Prokopenko describes the user has requested a particular day, which would correspond to a parameter, and a particular time that corresponds to that parameter)

With regard to claim 14, Prokopenko further discloses wherein said signal processing means is removable from said information processing apparatus (column 25, lines 44-48, Prokopenko discloses the application program, which would process the incoming signal, can be resident on a removable medium).

Claim 15 is the method of claim 11, and is analyzed and rejected accordingly.

Claim 16 is the computer instructions to drive the system of claim 11, and is analyzed and rejected accordingly.

Claim 17 is rejected as applied to claim 16.

3. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prokopenko in view of Zomaya, in further view of Schlack et al, US Patent # 7260823, hereinafter Schlack.

With regard to claim 4, Prokopenko in view of Zomaya discloses:

A center processing apparatus according to claim 3. Schlack further discloses wherein said selecting means includes determining means which calculates a variation in the user information and which determines whether or not the variation is greater than a predetermined threshold, and said selecting means classifies the users into predetermined groups based on the result of determination by said determining means. Specifically, Schlack discloses calculating variances in viewer behavior and placing viewers in predefined groups based on meeting specific behavioral thresholds (Column 26, line 64 - column 27, line; Schlack discusses the determining of a particular user/group by the use of thresholds. For example, based on how slowly or fast a particular person changes channels is a factor in determining what particular user is operating the TV). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature as taught by Schlack in order to

recommend a programming schedule/viewer procedure based on the viewing habits of a particular viewer or viewer group. The advantage of such a system would have been to provide more targeted content and therefore more effective advertising.

With regard to claim 5, Prokopenko further discloses recording the optimal procedures derived based on the specific group (Prokopenko discloses the feature of storing the results of a pattern list based on user actions that would define a group; column 11, lines 9-16; Prokopenko specifically discloses storing the results of a generalization algorithm).

With regard to claim 6, Prokopenko further discloses a basic part determining means which, based on the result of determination by said determining means, acquires one procedure from said procedure recording means, and which, based on the acquired procedure, determines a basic part of a function to be provided to the user (column 9, lines 59-65; Prokopenko describes determining a recommendation list to be provided to the user); and unique part determining means which, based on the user information analyzed by said analyzing means, determines a part unique to the user in the function (column 10, lines 57-66; Prokopenko describes associating particular viewing habits with particular shows).

With regard to claim 7, Prokopenko in view of Zomaya fails to disclose updating of the threshold based on user information. Schlack further teaches the

updating of the threshold based on user information (column 30, lines 34-41; Schlack describes a rolling window of time in which, based on user interactions, raises or lowers the threshold). It would have been obvious to one of ordinary skill in the art at the time of invention to add this feature, as taught by Schlack. The advantage of doing this would have been to provide a more updated user profile to the information processing system to generate a more updated list of upgrades to the user.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prokopenko, in view of Zomaya, in further view of Kondo, US Patent # 6381369, hereinafter Kondo.

With regard to claim 13, Prokopenko in view of Zomaya discloses the information processing apparatus according to claim 11, however fails to disclose wherein said signal processing means performs an image creating process by performing classification adaptive processing on an input information signal.

Kondo, discloses this feature (Figure 7 and column 13, lines 63-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature as taught by Kondo to the system of Prokopenko in view of Zomaya in order to decode signal streams with different resolutions. The advantage would have been the ability to view signals of different formats.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MARK D. FEATHERSTONE** whose telephone number is (571)270-3750. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F US Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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